

What is claimed is:

1. A method of displaying a multi-mode stereoscopic image, comprising the steps of:

displaying video signals obtained by photographing an object at a different angle on a display unit;

generating a mode signal for assigning a stereoscopic mode or a plane mode;

separating a picture displayed on the display unit into a left-eye picture and a right-eye picture being incident to the left eye and the right eye of an observer in the stereoscopic mode; and

transmitting the picture displayed on the display unit toward the observer as it is in the plane mode.

2. A multi-mode stereoscopic image displaying apparatus, comprising:

an image signal converter for combining video signals obtained by photographing an object at a different angle;

a light source for generating a light;

a display device for taking advantage of a light inputted from the light source to display the video signals received from the image signal converter; and

a variable color barrier for separating a picture on the display device into a left-eye picture and a right-eye picture in response to first and second voltages set to a different voltage level in a stereoscopic mode while transmitting said picture on the display device as it is in response to a third voltage other than said first and second voltage in a plane mode, said barrier being opposed to the display device and having adjacent pixels

alternated with each other in such a manner to have a complementary color relationship.

3. The multi-mode stereoscopic image display apparatus according to claim 2, wherein the variable color barrier is arranged at the front side of the display device.

4. The multi-mode stereoscopic image display apparatus according to claim 2, wherein the variable color barrier is arranged between the light source and the display device.

5. The multi-mode stereoscopic image display apparatus according to claim 2, wherein the variable color barrier is a liquid crystal display panel adopting any one of an electrically controlled birefringence (ECB) mode and a guest-host (GH) mode.

6. The multi-mode stereoscopic image display apparatus according to claim 2, further comprising:

a mode conversion controller for receiving a user instruction and generating a mode signal for assigning the stereoscopic mode or the plane mode in accordance with the user instruction;

a voltage source for generating said first, second and third voltages; and

a switch connected between the variable color barrier and the voltage source to apply said first, second and third voltages to the variable color barrier in response to the mode signal.

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7. A multi-mode stereoscopic image displaying apparatus, comprising:

an image signal converter for combining video signals obtained by photographing an object at a different angle;

a light source for generating a light;

a display device for taking advantage of a light inputted from the light source to display the video signals received from the image signal converter;

a color barrier having adjacent pixels alternated with each other in such a manner to have a complementary color relationship; and

a light-scattering device, being arranged between the display device, for transmitting an incident light as it is, in response to a first voltage in a stereoscopic mode and scattering said incident light in response to a second voltage other than said first voltage in a plane mode.

8. The multi-mode stereoscopic image display apparatus according to claim 7, wherein the light-scattering device includes a polymer-dispersed liquid crystal (PDLC).

9. The multi-mode stereoscopic image display apparatus according to claim 7, further comprising:

a mode conversion controller for receiving a user instruction and generating a mode signal for assigning the stereoscopic mode or the plane mode in accordance with the user instruction;

a voltage source for generating said first and second voltages; and

a switch connected between the variable color barrier and the voltage source to apply said first and second

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voltages to the variable color barrier in response to the
mode signal.

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